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App. Serial No. 10/537,674
Docket No.: US020511 US

Remarks

Claims 1-18 are currently pending in the patent application. For the reasons and arguments set forth below, Applicant respectfully submits that the claimed invention is allowable over the cited references.

The non-final Office Action dated February 28, 2006, indicated the following rejections: claim 16 stand rejected under 35 U.S.C. § 112(2) with regard to a tradename; claim 18 stands rejected under 35 U.S.C. § 102(b) over Notani *et al.* (US 5,349,317); claims 1-3 and 10-13 stand rejected under 35 U.S.C. § 103(a) over Liao *et al.* (US 6,570,249) in view of Jacobs *et al.* (US 4,811,082); claims 4 and 7 stand rejected under 35 U.S.C. § 103(a) over Liao in view of Jacobs and Cloud *et al.* (US 5,815,427); claims 5-6 and 8-9 stand rejected under 35 U.S.C. § 103(a) over Liao, Jacobs and Notani; claim 7 stands rejected under 35 U.S.C. § 103(a) over Liao and Jacobs in view of Grellman *et al.* (US 4,600,907); and claim 16 stands rejected over Liao, Jacobs and Cloud, in view of Notani.

With respect to the Section 112(2) rejection of claim 16, Applicant has removed the tradename, as requested, from this claim. Applicant submits that the rejection has been overcome and requests that it be removed.

Applicant respectfully traverses the Section 102(b) rejection of claim 18 based on the '317 reference because the Office Action fails to present a reference that corresponds to each of the claimed limitations and the case law on which the rejections rely is inapplicable. The '317 reference fails to teach several of the claimed limitations such as the "ball grid array package." Applicant has amended claim 18 such that the package type is more explicitly recited at each occurrence of the word "package." Applicant notes that this claim term was already present in the preamble as antecedent basis for the "package;" therefore, the Examiner's rejection was improper and the scope of the claim has remained the same. Without a presentation of correspondence to each of the claimed limitations, the rejections are improper and Applicant requests that they be withdrawn.

Applicant respectfully traverses the Section 103(a) rejections of claims 1-17 over Liao *et al.* (US 6,570,249) in view of Jacobs *et al.* (US 4,811,082). The modification of the Liao reference as asserted by the Office Action, using a grounding strap to connect the

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grounding ring (13) to the grounding pads (55) of the electronic component (41), would render the Liao reference inoperable, thus defeating the purpose of Liao. (Figs. 4A, 4B, and 5). Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." MPEP §2140.01 In addition, a Section 103(a) rejection cannot be maintained when the asserted modification undermines purpose of the main reference. MPEP § 2143.01, *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984).

With respect to independent claim 1, the Office Action acknowledges that the Liao reference does not disclose a grounding strap coupling the grounding ring to the grounding pads of the integrated circuit. The Office action attempts to address this deficiency by combining the Liao reference with the Jacobs reference, the cited part of which teaches decal interconnections. The Liao reference teaches using bonding wires (33) to connect the ground pads of the bond pads (21) to a first set of ground fingers (53) that are electrically connected to the ground bond pads (55) of an electronic component (41) and bonding wires (34) to connect a second set of ground fingers (53) to a grounding ring (13) wherein the second set of ground fingers (53) are in parallel connection with the first set of ground fingers (53). (Figs. 4A, 4B, and 5; col. 5, lines 51-61). These connections allow the electronic device (41) to selectively connect to either the bond pads (21) or the grounding ring (13). (Fig. 4B). If one were to use a grounding strap to couple the grounding ring (13) to the ground pads (56) of the electronic device (41) it would render the Liao reference inoperable. (Fig. 4B). Accordingly, the Section 103(a) rejections of claims 1-17 are improper and Applicant requests that they be withdrawn.

In regard to dependent claims 2-17, which depend from claim 1, the Applicant requests that the Section 103(a) rejections be withdrawn, because they are improper for the reasons discussed above.

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Moreover, the references cited by the Office Action do not teach or suggest all of the limitations found in the claimed invention. For example, the asserted combinations of references (Liao in view of Jacobs) do not teach or suggest the claim 11 and claim 14 limitations directed to a grounding strap further comprising, a dielectric having a second cross-section, the cross-section of the dielectric being about equal to the cross-section of the first conductor. The Jacobs reference teaches a decal 31 that is made of a low dielectric flexible material which has a thin film metal signal wire 35 embedded in it. (Fig. 1, col. 13: lines 14-19) The cross-section of the dielectric material is much larger than that of the thin film metal signal wire 35 as is evident in Fig. 1 of the Jacobs reference. This directly contradicts the limitation in claim 11 and claim 14 of the invention that the cross-section of the dielectric and the conductor are about equal. Moreover, claim 11 and claim 14 have a limitation directed to leaving a first gap and a second gap of the first conductor exposed. The cited portion of the Jacobs reference does not teach leaving a first and second gap of the first conductor exposed as in claims 11 and 14 of the invention.

In another example, the asserted combination of references (Liao in view of Jacobs) do not teach or suggest the claim 12 and claim 15 limitations directed to a grounding strap further comprising, a second conducting material applied to a first conductor at a first gap and a second gap. The Office Action does not point out what the second conductor is in relation to the cited section of the Jacobs reference. The Office Action only identifies the first conductor, a thin film metal signal wire 35. (Fig. 1) In fact the Office Action makes no mention of what or where the second conductor is. The cited portion of the Jacobs reference does show a second conductor, ground lines 41; however, the Office Action fails to mention applying the second conductor to the first conductor at the first and second gaps as in claims 12 and 15 of the invention. (Fig. 1)


Accordingly, the Section 103(a) rejections of claims 1-17 are improper and Applicant requests that they be withdrawn.

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In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of Philips Corporation at (408) 474-9063.

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